Global Research Studies on Adolescent Sexuality, Reproductive Health and Fertility

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I. INTRODUCTION

This paper reviews global studies on issues related to sexuality, reproductive health and fertility dimensions of the life of present-day adolescents. The age range covered in this paper is 10 to 19 years, corresponding to the World Health Organization's definition of adolescence. Thus, the subject of this paper includes those in the stage of puberty or the transition period between childhood and adolescence inasmuch as reproductive health and fertility issues of adolescents cannot be isolated from other dimensions of life.

Thus, this paper reviews data around four main topics: 1) the adolescent population: its social impact and implications to reproductive health, 2) an overview of adolescence as a developmental stage and the profile of today's adolescents in the light of the changes and developmental tasks corresponding to this stage of the life span; 3) the description of the major forces of influence and their impact on the developmental process involving sexuality, reproductive health and fertility of the adolescents, and 4) the sexual and reproductive health issues of adolescents and their impact on society at large.

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II. ADOLESCENT POPULATION AND ITS SOCIAL IMPACT

The Size of the Adolescent Population

The World's Youth Report estimates over 555 million adolescents between the age group 15-19. This constitutes close to 10% of the world's population. If we expand the definition of adolescents to include 10-24, this will translate to about 1.7 billion people, with 85% living in less developed countries.

Tables 1 and 2 show this disproportionate population composition between the more developed and less developed world.

TABLE 1. Population, Ages 10–24 and 15-19, 2000

	Population in Millions Ages 10-24	Population in Millions Ages 15-19
MORE DEVELOPED	241 (14%)	81 (15%)
LESS DEVELOPED	1,423 (86%)	474 (85%)
TOTAL	1,663 (100%)	555 (100%)

SOURCE: Population Reference Bureau, World's Youth 2000

The implications of these figures give us an indication that the bulk of adolescent issues will be most critical in developing societies. Table 2 shows that within the Southeast Asian countries, Indonesia ranks highest, followed by Vietnam and the the Philippines, in terms of proportion of population aged 10-24 and 15-19.

Adolescent Population and its Implication for Population Growth

Given the current demographic trends, it is expected that the reproductive decisions of adolescents will have a great impact on world population levels and subsequently the country's rate of social and economic development. In particular, the decisions these young people make regarding the family size and the timing of births, will make today's youth an important group in determining the size of world population for years to come.

Reducing the incidence of early childbearing and age at first birth both contribute to increasing the length of generations and subsequently reducing the impact of population momentum. This particular concern is relevant for young people who are sexually active and/or marrying or giving birth early. Worldwide projections show that if the current average age at first birth for young women today rises to just two-and-a-half years later, population size by 2100 would be 10% lower than the standard projections assuming no change in the average age at first birth at all. Similarly, if the age at first birth rose to five years higher, population size would be 20% lower than projected (Population Reference Bureau, 2000).

TABLE 2. Southeast Asia Population, Ages 10–24 and 15-19, 2000

	Population in Millions Ages 10-24	Percentage	Population in Millions Ages 15-19	Percentage
Cambodia	3.3	2.1	1.2	2.3
Indonesia	63.6	40.8	21.3	40.5
Laos	1.7	1.1	0.5	0.9
Malaysia	6.5	4.1	2.3	4.4
Myanmar	14.0	8.9	5.0	9.5
Philippines	24.0	15.4	7.9	15.0
Singapore	0.7	0.4	0.2	0.4
Thailand	17.3	11.1	5.6	10.6
Vietnam	25.3	16.2	8.6	16.3
Total	**155.8**	**100.0**	**52.6**	**99.9**

Source: Population Reference Bureau, World's Youth 2000

Emerging Pattern of Decline in Adolescent Birth Rate

The good news seems to be that recent data reflect a pattern of decline in adolescent birth rate in developed countries over the past 25 years (Singh & Darroch, 2000). This pattern is also reflected in developing countries where delayed childbearing is attributed as the reason for the decline in adolescent pregnancy. Studies conducted between two groups of women, aged 40-44 and a later cohort aged 20-25 showed large declines in China. Only 8% of the later cohort reported having children during adolescence compared to 22% for the earlier cohort. Similar results have been identified in Sri Lanka, as well, where adolescent pregnancy is attributed to 31% for an earlier cohort and 16% of the later one. In the Philippines, the declines were from 25% to 21%, respectively while in Indonesia the rate went from 51% to 33% (Adolescence Education Newsletter, 1998).

According to the 1995 cycle of the National Survey of Family Growth which studied the increase in teenage birthrate in the 1980s and the subsequent decline in the mid-1990s, several factors have been found to be associated relative to each pattern. Negative changes in family environments (such as increases in family disruption) and an increase in the proportion of early sexual debut among teenagers have been identified as factors associated with the increase in the birth rate in the 1980s. The pattern of decline in recent teenage birthrates however, has been found to be associated with positive changes in family environments (such as improvements in maternal education), formal sex education programs and discussion with parents about sex, stabilization in the proportion of teenagers having sex at an early age and improved contraceptive use at first sex (Manlove & et al., 2000).

Urbanization and the Adolescent

Migration from rural to urban areas has offered adolescents better access to education, health services and employment. At the same time, it also exposes them to a pool of unhealthy vices that make them more vulnerable to the risks of drug and alcohol abuse, violence and sexually transmitted infections. Aside from this, separation from the extended family and a loss of traditional culture is experienced in urban areas as a result of higher media saturation and globalization of glitz and glamour.

According to recent population trends, the number of adolescents between the ages of 10 and 19 living in urban areas is projected to more than double within the next 25 years (Population Reference Bureau, 2000). If in 1990, the urban population was 294 million compared to a rural population of 578 million, a reversal in the proportion of the rural and urban population is expected by 2025. It is projected that 634 million will live in urban areas while there will be a decrease to 499 million in rural areas.

This is important to note as most studies reflect the correlation of urbanization with different factors affecting the health and welfare of adolescents such as levels of education, sexual activity and marriage. Population growth in the urban areas is also very likely to have an effect on the kinds of jobs and housing available to adolescents in their adulthood years.

III. OVERVIEW OF ADOLESCENCE AS A DEVELOPMENTAL STAGE

Providing the adolescent with access to information, particularly information concerning their sexual and reproductive health, is vital to their future (Population Reference Bureau, 2000). It is also important for parents, schools, and other agencies involved in the general formation and socialization of adolescents. Hence, the paper will review the work of social and developmental psychologists in this regard, beginning from early developmental stage of adolescents in order to better understand the factors and general motivations behind their attitudes and behavior.

Adolescence and Puberty: A Continuum

Adolescence is generally considered as a critical period in any person's life. It is at this stage when most changes (physical, psychological, sexual or social) occur. It is normally experienced as a period of turmoil and a turning point, not only for the individual concerned but also for the family and society that serve as vital contexts of the adolescent's developmental processes.

The term adolescent comes from the Latin word *adolescere* meaning "to grow" or "to grow into maturity." Normal adolescent development is said to start from the age of 12 years until the age of 19. The American Academy of Child and Adolescent generally divides adolescence into three main stages with different characteristics, traits and abilities emerging for each stage (Table 3).

TABLE 3. Characteristics, Traits and Abilities Emerging during the Different Stages of Adolescence

Early Adolescence (12-14 years old)	Middle Adolescence (14-17 years old)	Late Adolescence (17-19 years old)
• Feelings are expressed with actions rather than words • less attention shown to parents • search for new people to love • heavier peer group influence • female sexuality more advanced than boys • same sex friends and group activities • experimentation with body • experimentation with cigarettes, marijuana, and alcohol	• extremely concerned with appearance and one's own body • feelings of strangeness with one's own body • periods of sadness associated with psychological loss of parents • some sexual aggressive energies, but directed in creative and career interests • concerns about sexual attractiveness • frequently changing relationships • movements towards heterosexuality with fears of homosexuality • tenderness and fears shown toward opposite sex • feelings of love and passion • greater capacity for setting goals	• ability to delay gratification • ability to express ideas in words • more developed sense of humor • more defined work habits • higher level of concern for the future • concerned with serious relationships • clear sexual identity • capacity for tender and sensual love

Adapted from the American Academy of Child and Adolescent Psychology. Available online at http://educ.indiana.edu/cas/adol/development.html

Before adolescence, however, is the stage of puberty, a developmental span when the child changes from an asexual to a sexual person. It refers primarily to physical rather than behavioral changes—a stage when an individual becomes sexually mature and capable of producing offspring. It is the threshold of adolescence. The main features of puberty are rapid growth and marked changes in body proportions. This rapid development is sometimes called the "puberty growth spurt," and usually lasts for a year or two. Girls, as a group, tend to mature more rapidly than boys, but there are marked variations within each sex group. Research has shown that approximately 50% of all girls mature between 12.5 and 14.5 years, and the average boy become sexually mature between the ages of 14 and 16.5, with 50% of all boys maturing between 14 and 15.5 years (Hurlock, 1982).

Although the criteria most often used to determine the onset of puberty are the menarche for girls and spermarche or nocturnal emissions for boys, these changes actually occur during the midpoint in puberty and are usually preceded by the development of the sex organs and secondary sex characteristics. These changes and conditions oftentimes breed negative attitudes and behavior. This is why puberty is often characterized as a "Negative Phase" (Havighurst, 1972) wherein the individual adopts an "anti" attitude toward life or seems to be losing some

of his/her good nature characteristic. However, as the term "phase" implies, this attitude occurs for a short duration and seems to be over as the individual progresses through adolescence and becomes more sexually mature.

The growth of research in the field of endocrinology has allowed medical science to pinpoint the exact causes of these physical changes at puberty. It is now known that five years before children become sexually mature there is a small excretion of sex hormones in both boys and girls. The amount increases over time, leading to the maturing of the structure and function of sex organs. It has been established that there is a close relationship between the pituitary gland, located at the base of the brain and the gonads, or sex glands (Hurlock, 1982).

According to several reports, boys and girls around the world are reaching puberty earlier now than in past generations (Population Reference Bureau, 2000). This is especially true in the U.S. and in other developed countries such as the Scandinavian countries and those in Europe. The given explanation for this points to better health, better prenatal and postnatal medical care, and better nutrition (Sommer, 1978; Tanner, 1978). The age at marriage is also rising. Thus, young people are facing a longer period of time during which they are sexually mature and may be sexually active before marriage (Population Reference Bureau, 2000).

The Adolescents' Developmental Tasks

Each life stage is associated with a series of developmental tasks, which the individual must take on. For the stage of adolescence, Erikson identified the task as one *of identity versus role diffusion.* Psychologists generally agree that indeed, the basic component of adolescent development is one of either identity formation or identity confusion. Havighurst (1972)[1], on his part, cited for adolescence the following developmental tasks:

- Achieving new and more mature relations with age-mates of both sexes
- Achieving a masculine or feminine social role
- Accepting one's physique and using one's body effectively
- Desiring, accepting, and achieving socially responsible behavior
- Achieving emotional independence from parents and other adults
- Preparing for an economic career
- Preparing for marriage and family life
- Developing an ideology and acquiring a set of values and an ethical system as a guide to behavior.

The failure to master these developmental tasks gives rise to two serious consequences. One is that unfavorable social judgments are inevitable; members of the individual's peer group will regard him or her as immature, a label that carries a stigma at any age. This leads to

unfavorable self-judgment, which in turn leads to unfavorable concept of self. Another consequence is that the foundations for the mastery of later developmental tasks are inadequate. As a result, the individual continues to lag behind his peers, and this increases his feelings of inadequacy. The implications of these developments are manifold, including the young person's vulnerability to negative influences in his/her desire to be accepted by his peers

Changes During Adolescence and How They are Experienced by the Adolescents

Physical and Biological Changes. Because the growth spurt experienced during puberty is largely unsynchronized, the adolescent may be painfully conscious of a disproportionate physical appearance. Many are embarrassed about the development of secondary sexual characteristics and external genetic organs. The size of these organs is of particular concern to them. Adolescents are also worried about the rate of the changes occurring in their bodies. Some may fear that the changes are arriving too soon and too quickly while others may worry over the changes not coming soon enough. In any case, it is not uncommon for those who find themselves developing at a different rate from their peers to harbor feelings of insecurity and inferiority (Koetsawang, 1990). It has also been reported that many adolescents suffer from low self-esteem and unfavorable self-concepts and are rarely confident in the advice and roles of parents or other elders[2]. Few are satisfied with their bodies and their appearance (Mahooney and Finch, 1976) and even then, this satisfaction and contentment may only be temporary or fleeting.

Social Changes. The peer group emerges as a dominant factor in the adolescent's life. There is an increase in peer group influence and a notable decrease in parental influence. New social groupings also occur during this period. The gangs and groups of childhood break up to form new groups as differences in individual interests start to emerge and as peer groups become more selective (Hurlock, 1982). Popularity becomes an important factor in choosing peers.

Interest in the opposite sex also becomes apparent at this stage. The young person must take on the developmental task of forming new and mature relationships with the opposite sex. This new behavior and attitude is often romantic in nature and often accompanied by a strong desire to win the approval of members of the opposite sex. While the development of this interest follows a predictable pattern, the pace of this development may vary because of the differences in the age of sexual maturing, opportunities to develop this interest and the interests of the young person's peer group. As adolescence progresses, the individual's interest in the opposite sex becomes increasingly stronger. The competency with which the adolescent handles this interest is dependent on how socially active he or she is. Greater social participation, in general, is associated with greater social competency (Hurlock, 1982).

The adolescent's increased interaction with the opposite gender is accompanied by a growing interest in sex. A study in the U.S. found that among adolescents, girls' interest in the subject of sex is mostly on issues such as birth control (i.e., the pill), abortion and pregnancy. Boys, on the other hand, are more interested in sexual intercourse, its enjoyment and issues tied to its consequences such as venereal diseases and birth control (Sorenson, 1973; Spanier, 1976).

Young people often have inadequate or misleading information on sexuality and reproductive health. This problem is further confounded by lack of access to reproductive health services. Because of their growing interest in sex, adolescents often try to get more information on the subject. Because they often feel that whatever information they receive from their parents is inadequate, they tend to seek other sources of information, including the media, their peers, sex education classes in school, books and experimentation such as masturbation, petting and eventually, intercourse.

Another preoccupation is their interest in status symbols. These status symbols are important because they serve to tell others in a group or community that whoever has them is superior or has a higher status in the group than the other members. Thus, adolescents are concerned with status symbols because it is by these symbols that they find themselves being judged and, in turn, by which they judge others. A favorable judgment leads to social acceptance and the respect and admiration of their peers. Practically everything in an adolescent's life may be viewed as a status symbol, from the person they are dating to their peer group to their socio-economic status.

There are three areas of interest, in particular, that are affected by or stem from this general interest in and concern for **status symbols.** These are: personal interests, social interests and engaging in 'tabooed pleasures.'

Personal Interest. Personal interest is generally exhibited in four areas: appearance, clothes, achievement, and independence. All four interests are strongly motivated by standards of the peer group as well as the desire to exhibit or manifest a near-adult status (Hurlock, 1982).

Social Interests. Hurlock (1982) says that while social interests of American youth may depend on the opportunities available to them to develop these interests (i.e., economic status, popularity among peer group), there are certain social interests that are almost universal among adolescents. The most common of these are parties, hanging out, extracurricular activities, and school or social affiliations.

Parties are a popular venue among adolescents since they provide young people opportunities to hang out with their peers as well as socialize with the opposite sex. Hanging out is usually an activity among peers of the same sex. Adolescents often 'hang out' just to watch a movie or spend time with each other and engage in conversation or gossip among themselves.

Extracurricular activities and school or social affiliations may also determine social identity, sometimes to the extent that adolescents get typecast into a certain role (i.e., jocks, nerds, geeks, goody-goody). While these may lead to such negative effects as sex typing, underachievement, and inferiority in other fields, there are also many positive effects of engaging in extracurricular activities.

Finally, sports and extracurricular activities may also serve as an alternate activity to deviant behavior such as smoking, drinking and drug use. Getting young people interested in activities such as these may help to reduce the likelihood of engaging in other more harmful behavior. These are important considerations that should be taken seriously in any intervention pertaining to adolescents.

Interests in "Tabooed Pleasures". There are four main tabooed pleasures (premarital sex, smoking, drinking and drug use) mentioned in the literature that adolescents engage in to symbolize their near adult status and their identity with the peer group. Each will be briefly discussed in this section.

a. *Premarital Sex.* Adolescence is a period when young people venture into sexual activity partly due to curiosity, possibly due to the rise in sex hormones (although the latter has never been specifically proven), and partly due to the need to create the impression that they are nearly adults (Hurlock, 1982). The attitude with which the adolescent faces sexuality is greatly dependent on how the parents have communicated on the subject of sex with their child. For the adolescent, sexuality is a very private matter and common behaviors and feelings may be feelings of guilt, hopes and fears, low self-esteem, and inner conflicts involving acceptance or rejection by others (Hilliard, no date). Although most adolescents will often turn to their peers to help them get through this difficult adjustment period, it is imperative for parents to make their children comfortable to talk about the subject. Talking openly will help the adolescent feel better, aid in their self-confidence (Sorenson, 1973) and moreover, ensure that they get the proper and accurate information regarding sexual activity.

b. *Smoking.* While smoking begins in different ages in different societies, it is generally observed to begin during adolescence and often associated with boys, although girls also take up this activity. Smoking is often popular during social activities and like the rest of the tabooed pleasures, is often looked upon as a status symbol for adulthood (Hurlock, 1982). In a study conducted in East Asia and the Pacific among children aged 9-17, the percentage of having tried smoking among respondents ranged from more than 50% in Australia, Indonesia, Mongolia and Papua, New Guinea to 16-19% in Lao PDR, Thailand and Cambodia. (UNICEF, 2001). Another study conducted in five countries in Asia found that boys generally smoke more than girls (Choe et al, 2001).

c. *Drinking.* It is not uncommon for teens to engage in drinking despite their dislike for the taste as peer pressure and the desire to fit in and be socially accepted generally push them

to take up the activity. It is said that eventually, the taste of liquor is developed and while it is unlikely for adolescents to become alcoholics in their teens (since drinking is usually a peer group activity), there still remains reason for caution as the basis for chronic alcoholism is supposedly laid during the adolescent years and will depend significantly on many conditions during this period (Fiske, 1978; McMorrow, 1977).

A study in East Asia and Pacific reports that the percentage of having tried alcohol drinks is highest in Australia with more than 50% followed by 42-45% in Papua, New Guinea and Mongolia and finally 14-18% in East Timor, Indonesia, Thailand, Malaysia, Myanmar and Cambodia (UNICEF, 2001).

d. *Drug Use.* The use of drugs often begins with the less potent ones such as marijuana and then later moves on to the more addictive and harmful ones. Aside from its appeal as a status symbol and as a factor for social acceptance, the use of drugs may also stem from other causes as well, studies have discovered. Adolescents may also use drugs out of a need for independence and the desire to break free from family restrictions. Boredom, curiosity and a desire for adventure may also be motivating factors (Kandell, 1978; La Driere et al, 1975). Certain types have also been shown to be more prone to become heavy users of drugs than others. These include those with family problems, those who lack social acceptance in school, and those who are unable to cope satisfactorily with new problems that arise during adolescence (Jessor, 1976). The heaviest users seem to be boys who belong to gangs (Friedman et al, 1976; Jessor, 1976) while girls, with the exception of those who belong to gangs, use drugs far less than boys.

Changes in Awareness of Sex Roles. As already mentioned, young people become more aware of the opposite sex during adolescence, resulting not only in a growing curiosity about sex and dating but also in an increasing pressure to play the approved role for one's own sex. This is generally easier for males than it is for females, as sexually appropriate behavior is much more emphasized with boys than with girls growing up. The transition also becomes easier for boys as they discover that the male role carries far more prestige than the female role.

The negative effects of this sex-role typing that emerge during adolescence are varied and most of these weigh more heavily on girls rather than on boys. Because of sex typing there is a tendency for boys to feel superior and patronizing. Both sexes tend to also adopt attitudes of sex bias or devalue female achievements regardless of whether they are equal or superior to male achievements. Because the social status of adolescent girls often depends on their ability to conform to the "feminine" stereotype, it is not surprising to find that most of them cultivate a fear of success and deliberately downplay or avoid achievement in order to fit in and be accepted (Hurlock, 1982; The Center for Research on Girls & Women in Sports, 1997).

The traditional roles of males and females begin with the family and gender differences and are intensified or encouraged through the different agencies of socialization the adolescent

comes in contact with, one of which may be sex education courses which contribute to foster concepts of the male and feminine roles in families and relationships (Hurlock, 1982).

Emotional Changes. As noted earlier, adolescence induces an "identity crisis" in a young person. Seemingly overnight, adolescents are at odds with everything and everyone, even with themselves. "They have entered an age of identity crisis, new issues about sexuality, extensive education on the topic of sex, peer pressures toward drugs and alcohol, and how to make it through adolescence safely. It is a combination of all these things that cause the confusion, the chaos, and the sensitivity that they experience" (Hilliard, n.d.).

a. *Conflict with One's Self.* As the youth deal with their changing bodies, they are also seeking to clarify who they are individually and what their role in society is to be. This conflict within themselves, compounded by the increased pressure of fitting in to a new social environment, often results in emotional tension—increased sensitivity, insecurity, irritability and excitability, especially during early adolescence, though this emotional tension has been found to gradually lessen as adolescence progresses (Hurlock, 1982).

b. *Conflict with One's Parents.* In the attempt to establish a personal sense of self, the adolescent starts questioning his identity, which is usually modeled during childhood after his parents. During adolescence, the youth begins to recognize a uniqueness and separation from his parents (Ingersoll, n.d.). As a result, the adolescent sometimes feels that he cannot relate to his parents anymore or that his parents do not understand him. This leads to a distance in their relationship, or what many refer to as the "generation gap." The "generation gap" is not necessarily something welcomed by a teenager, but just a natural feeling that develops during adolescence. Typically, teenagers still yearn to depend on their parents while at the same time needing independence from them. This often results in adolescents responding with hostility and a lack of cooperation during confrontations with parents (Ingersoll, n.d.).

Behavioral Changes. These types of changes are most visible and lend themselves quite easily to empirical studies. In fact global studies on adolescents quite unilaterally focus more on the changes and trends of adolescent behavior.

In past generations, the norms for dating and relationships between boys and girls followed a fairly conservative fashion as dictated by socially approved attitudes. These days, however, new social attitudes toward sex[3] and dating, the ready availability of contraceptive devices and the legalization of abortion in some countries have brought about radical changes in adolescent attitudes and behavior regarding sex, dating and heterosexual relationships[4]. One significant difference, for example, is the faster pace of development from one stage to another in the heterosexual relationship than in the past. Attitudes regarding certain patterns of behavior on dating and courtship are more liberal today than before. For example, kissing on the first date is fairly common and kissing and petting, even in public, are much more tolerated (even approved of) than before in many societies and are also depicted more often by the media.

IV. INFLUENCING FORCES AND THEIR IMPACT ON THE ADOLESCENT

This section discusses the various areas of socialization that the adolescent finds himself immersed in and also, hopefully, bring notice to the significance of each and every factor in the adolescent's life.

The Family

Before all else is the family. It is this family with which children have continuous contact and, within this family, the first context in which they begin to socialize. "It is a world with which they have nothing to compare and as such, it is the most important socializing agency" (Elkin & Handel, 1984).

During adolescence, relations within the family, between the parents and the adolescent in particular, are strained and become increasingly difficult. One of the biggest conflicts among teenagers and elders is the sudden need for the child to have self-identity and personal freedom, or room to grow up in. Often, this need to become independent resulting in the adolescent distancing themselves from their parent will come so fast that parents are confused and reluctant to let go (Hilliard, n.d.).

Lillian Troll and Vern Bengtson (Elkin & Handel, 1984) add that one challenge also facing parents and teens trying to relate to one another is the differences in the historical and cultural context the parent grew up in and the ones currently affecting the youth. Those different events and periods shape a different kind of adolescence—accounting for the so-called "generation gap." Troll and Bengtson reviewed several studies that the similarity in values between parent and child varied according to the life stage of the child. In adolescence, the child tends to share similar religious values but have distinctively more liberal attitudes about sexuality. Still, the general pattern of sexual attitudes is in relation to their parents; liberal parents tend to socialize more liberal youth, while conservative parents tend to socialize more conservative youth. In both cases though, the youth are more liberal than their parents. When it comes to teen sexuality, peer groups and media tend to have a greater influence on teen sexuality, but that does not diminish the role of parents in transferring values that reinforce certain practices, positive or otherwise.

In fact, studies show that parental influence on certain issues has enormous capacity to affect the attitudes and behavior of adolescents, from smoking behavior to sexual activity. This influence works both ways and can be seen as a negative influence or a positive one depending on the views and values the parents choose to impart. For example, in certain societies, traditional beliefs of parents and the society pose a cultural barrier for improving the prosperity of young adolescents. It has been observed that certain views and practices of parents such as the belief that education is more beneficial to boys than girls and the establishment of certain protective measures to ensure the safety of girls within a village

contribute to a higher health risk among young women and limit these women from job opportunities that require higher educational levels. This thus prevents young adolescent women from improving their financial and social standing and at the same time from contributing to social development (Population Reference Bureau, 2000). In addition, parental pressure was seen to be significant in the incidence of adolescent and child marriage in certain countries. Studies in India and Nepal, for example, show that a majority of the adolescents who married early reported that they did so mostly because their parents were in favor of it (Achmad et al, 2001). Marrying at an early age has many implications for young adolescents, not the least of which is continuing with their education. For girls, in particular, it also means early childbearing and motherhood, which may pose serious health risks if the girl is too young.

On a more positive level, parents can also affect the sexual attitudes and behavior of their children even by simply being present in their children's lives. In a 1992 U.S. survey on adolescents, for example, it was found that among male and female adolescents, living in a two-parent family was associated with never having had sexual intercourse (Santelli et al, 2000). Another study conducted on 13-18 year olds showed that in addition to having both parents present in the home, high parental expectancy and the feeling that parents care are also important factors in adolescents choosing not to engage in sex (Lammers et al, 2000). Furthermore, studies have shown that teenagers who feel that they have a good level of communication and are satisfied with their relationship with their parents are less likely to engage in sexual activity (Karofsky, Zeng & Kosorok, 2001; Dittus & Jaccard, 2000). Positive communication in educating the youth about proper sexual and health practices has also been shown to encourage both abstinence from sex (Santelli et al, 2000) and responsible sexual behavior among girls (Bowling and Werner-Wilson, 2000).

While most studies tend to reflect the significance of both parents on affecting the attitudes and behavior of their children, certain influential factors seem to be associated with either one parent in the family. For example, it is maternal disapproval of sex that has been found to be associated with delay in first intercourse (McPherson & MacFarlane, 2001) and a smaller likelihood to initiate sexual activity or to become pregnant (Dittus & Jaccard, 2000). This does not undermine, however, the role of fathers in the upbringing of their children. A study by Bowling and Werner-Wilson (2000) showed that responsible sexual behavior among adolescent females seemed to be associated with fathers who were involved in parenting and the father-daughter relationship and those who encouraged "androgynous" behavior in their daughters. This latter finding, therefore, reveals a long-term advantage for the avoidance of sex-role typing in the home.

Whether or not the role of each parent is significantly distinct from the other, it is clear that the support of a family is important for children who go through the trials of adolescence. It has been reported, for example, that in the U.S., a homeless teenage girl is 14 times more likely to become pregnant than a girl with a home (Population Reference Bureau, 2000).

The Peer Group

The influence of peers on an adolescent extends to practically everything in his lifestyle from his attitude to his speech to his interests, appearance and behavior. It is said that this influence seems strongest during early adolescence (ages 12-14) as an extension of the close gangs of late childhood and as the adolescent starts to spend more time outside of the home with his peers.

The influence of the peer group often begins with the concept of acceptance with the group and the pressure that goes along with this desire to obtain this acceptance. Adolescents, therefore, often find themselves going in or succumbing to this pressure, (deliberate or otherwise) coming from their peer group in order to be accepted. This giving in to pressure may take many forms from the seemingly harmless act of wearing the same type of clothes as the peer group to more harmful actions such as experimentation with drugs and alcohol.

Horrocks and Benimoff (1966) describe the pull of the peer group due to the fact that it "offers the adolescent a world in which he may socialize in a climate where the values that count are those that are set, not by adults, but by others his own age. Thus, it is in the society of his peers that the adolescent finds support for his efforts at emancipation and it is there that he can find a world that enables him to assume leadership if his worth as a person is such that he can assert leadership. In addition, the peer group is the major recreational outlet of the teenager."

Peers also have an effect on the sexual behavior of adolescents. According to Kinsman, a specialist in adolescent medicine from Philadelphia, young teens are more likely to have sexual intercourse if they believe that their friends have already done so. She mentioned that sexual initiation is a planned activity for these adolescents. The main motivation for adolescents to participate in sexual activity is not because it's cool but because they do not want to be left behind by their peers. Parents and educators can tackle this issue of sexual initiation by focusing also on peer groups instead of solely focusing on the individual adolescent (PR Newswire, 2000). By taking up other issues with the peer group, it is also possible to enforce the more positive influences of the peer group such as teamwork and camaraderie.

As adolescence progresses, the influence of the peer group begins to wane as the individual begins to veer away from the large group and starts to narrow down his or her own circle of friends. During this period, the individual makes the shift from preferring a large group of friends to choosing a smaller but closer circle of friends.

The School

The first task of utilizing schools as a forum for public health education is first ensuring that the youth are in school. In the past 10 years, the percentage of school-aged children in school has increased by 10 % (State of the World's Children 2002). However, the U.N. estimates

that still 404 million youth under the ages of 18 – or 38% of youth in less developed countries – do not attend school (Population Reference Bureau, 2000).

Even in countries where primary level schooling is compulsory, not every child is enrolled and many do not complete it. It has been reported that although 500 million children enroll in primary school worldwide, more than one-fifth or more than 100 million, two-thirds of which are girls, drop out before completing at least four years of primary school (Resource Center for Adolescent Pregnancy Prevention). In South Asia, over 96% of the children enroll in grade 1 of primary school, but only 50% reach grade 5. A significantly larger proportion of children in Southeast Asian countries reach grade 5. In Indonesia 80% of children complete primary education, in Bangladesh less than 50% reach grade 4, and in Malaysia over 95% complete primary education (Asian Institute for Development Communication, Module 1, 1998).

Research also shows that the number of girls enrolling and attending school is considerably lower than boys. This is more common in lesser-developed countries (Asian Institute for Development Communication, Module 1, 1998), which is reflective of the lower status of women in such societies. The Philippines is an exception to this pattern. In some of the poorest countries, however, fewer than half of young women receive a minimum of seven years of schooling. Still, progress is being made. These young women in poorer regions are reportedly more educated than their mothers were before and in more developed countries, the ratio of girls versus boys attending school is actually inverse: there are more girls than boys in both primary and secondary schools (Population Reference Bureau, 2000).

While, in general, poverty is the main factor for a significant number of youth not attending school[5], the attitude of the adolescent himself towards school and education, on the whole, contributes greatly to the decision of whether to stay in school and/or to engage in certain risk-taking behavior that could lead to expulsion or dropping out. Box 1 shows several factors influencing adolescent's attitudes towards education.

A positive influence of schooling is shown by Choe et al's study (2001), which determined that adolescents who plan to go to college or are already in college are much less likely to smoke than those who don't. This may indicate that ambition and the desire to achieve a college education are important factors in curbing or minimizing adolescent deviant behavior.

Furthermore, according to a 1995 study done in Botswana, the school has one of the largest potentials for influencing reproductive health attitudes of adolescents. This is because of the school's capacity to reach two avenues at the same time, the first one reaching the youth directly and the other, reaching them indirectly through their peers (Meekers & Ahmed, 2000).

The idea of educating youth about sexual health, however, has usually been met by resistance due to the fear that it will only reinforce sexual curiosity among teenagers. For two

BOX 1. Factors Influencing Adolescents' Attitudes towards Education

- Peer attitudes—whether they are college oriented or work-oriented
- Parental attitudes—whether parents consider education as a stepping stone to upward social mobility or only a necessity because it is required by law
- Grades—which indicate academic success or failure
- The relevance or practical value of various courses
- Attitudes towards teachers, administrators and academic and disciplinary policies
- Success in extracurricular activities
- Degree of social acceptance among classmates

\- Hurlock, *Developmental Psychology*, 1982

decades, parents, teachers and policymakers have debated not only on the issue of introducing sex education in school but also on whether sex education should exclusively promote abstinence or take a more comprehensive approach, including information on such controversial issues as contraception, abortion and sexual orientation.

Two nationwide surveys conducted in the U.S. show that, at present, most local policies and sex education in the U.S. overwhelmingly promote an abstinence-based approach as opposed to a contraceptive-based approach. Thus, although surveys show that most teachers would like to teach contraception and other controversial issues inside the classroom, they are unable to do so either because they are prohibited by local and school policy or because they are afraid of community recrimination (Dailard, 2001).

Teachers are not, however, the only ones in the U.S. yearning for more comprehensive sex education programs. A nationwide poll surveying American adults showed that 89% believe that it is important for young people to have information about contraception and prevention of STDs and that sex education programs should focus on how to avoid unintended pregnancies and STDs/HIV/AIDS not only through contraception but through abstinence as well (SIECUS Developments, 2000). Another study by the Kaiser Family Foundation (1998) also on American parents reflects similar findings citing that not only do 65% of parents feel that sex education should not only take a more comprehensive approach, most of these parents also believe that the amount of time spent on sex education should be significantly expanded (Dailard, 2001). This need is echoed by the students themselves who reportedly want more information regarding sexual and reproductive health issues than they are currently receiving (Kaiser Family Foundation, 1998).

Public support for the inclusion of proper sex education in schools is well placed as global research findings on communication and education show that sex education for children is actually beneficial rather than harmful to them, as previously feared. The Joint United Nations Programme on HIV/AIDS (UNAIDS) reports that HIV and sexual health education promotes safer sexual practices and does not result in increased sexual activity (Population Reference Bureau, 2000). Rather, the program interventions delayed the first intercourse experience of adolescents, which further reduced their risks of multiple partners, exposure to disease and higher likelihood of teenage pregnancy. UNAIDS also adds that sexual health education is more effective when started before the onset of sexual activity. This is supported by research from the Urban Institute (2000) cited by Dailard (2001) which suggests that students are not receiving information on sexual and reproductive health issues early enough to fully protect themselves against unplanned pregnancy and STDs (Figure I).

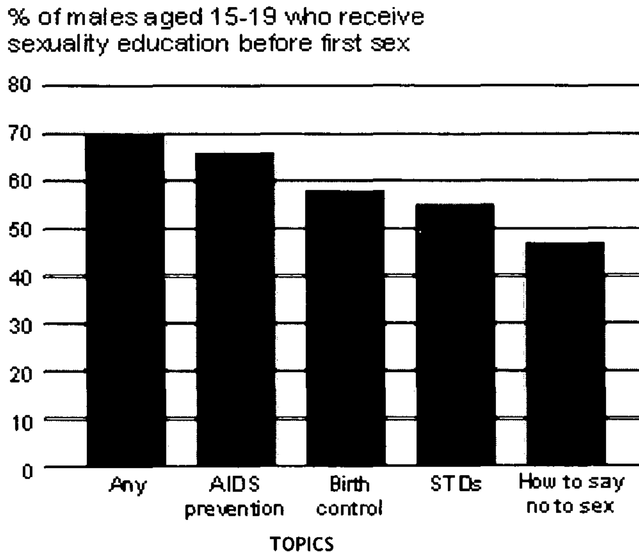
Additionally, the more comprehensive approach to sex education seems to be more effective, at least on imparting knowledge to young adolescents regarding the issues. According to the Kaiser Family Foundation (1998), students who were most recently educated through an abstinence-only approach were found to be less knowledgeable about pregnancy and disease prevention than those who were educated through more comprehensive sex education programs.

The Media

The role that mass media (television, music and print media) plays on adolescents' lives is undoubtedly significant. According to one study in the U.S., by the time adolescents graduate from high school, teenagers will have spent 20,000 hours watching television compared to the 12,000 hours they spend in the classroom (Media Project, Media Effects on Adolescent Development, n.d.). Also, with the advent of videocassette sales and rentals, pay-per-view TV, cable TV, videogames, and online interactive media, more and more adolescents are gaining greater access to media with graphic sexual and violent content than had been available in previous decades.

While a direct cause-and-effect relationship is yet to be firmly established, the National Institute of Mental Health in the U.S. has reported that "in magnitude, exposure to television violence is as strongly correlated with aggressive behavior as any other behavioral variable that has been measured" (American Psychiatric Association, n.d.). Violent and sexual contents on television have also been determined to develop a view of the world and relationships that may not necessarily be in line with reality. Individuals with greater exposure to media violence, for example, have a greater tendency to see the world they live in as dark and violent as opposed to those who watch less violent TV shows or those who watch less television, in general (American Psychiatric Association, n.d.).

FIGURE I: Knowledge Gap



Source: Lindberg LD, Ku L and Sonenstein F, Adolescents' reports of reproductive health education, 1988-1995, Family Planning Perspectives, 2000, 32(5): 220-226

In addition, the popular media has been found to have a negative effect on sex roles among young people in society. According to research, the tendency of the media to sexualize, romanticize and objectify young women often prompts young women to regard themselves in this way and thus, it is not surprising that they are often treated as such (Adler et al, 1992; Pipher, 1994).

A study by the Kaiser Family Foundation also showed that, 76% of teens said that one reason young people have sex is because TV shows and movies make it seem normal for kids. This finding supports that of another study conducted among 13 and 14 year olds, which showed that heavy exposure to sexually oriented television increased acceptance of premarital sex (Media Project, Media Effects on Adolescent Development, n.d.).

Furthermore, teenagers themselves list television as one of their primary sources for information about sex, even more so than school or their parents. This is unfortunate as most American teenagers say that they would prefer to get pregnancy and birth control information from their parents, but less than half of teens have had such a conversation (Media Project, The Facts).

On the other hand, the influence that the mass media has on adolescents may prove to be a powerful tool in shaping young adults' perspective on various issues. According to the head of the well-known NGO, Family Health International (FHI), Shyam Thapa, who led

the Asian Young Adult Reproductive Risk (AYARR) study in Nepal along with Vinrod Misha, mass media has had a positive effect in informing youth about various risky activities and social and health issues. "The data suggest that urban youth are generally receptive to receiving information on sexuality and reproductive health through mass media, which therefore has great potential in reproductive health campaigns and intervention programmes," Thapa said. Minhaz ul Haque, program officer with the Population Council in Pakistan, also adds that television programs need to be intelligently designed as they could easily send out messages with a negative impact (Devraj, 2001).

Like the school, the potential the mass media has for influencing young people is expanded because they reach both avenues (direct and indirect) by affecting not only the teens directly but affecting their peers as well.

Religion

Contrary to popular opinion, religion is actually one of the more important issues that adolescents are interested in and deal with today.

The subject of religion is crucial because it is during adolescence that most young people start questioning the religious beliefs and traditional practices of their childhood. Because of this, adolescence has sometimes been called "the period of religious doubt." Wagner (1978), however, argues that this religious doubt should actually be seen as more of a "religious questioning." He says: "Youngsters want to learn their religion on an intellectual basis rather than by blind acceptance. They question religion not because they want to be agnostic or atheistic, but because they want to accept religion in a way that is meaningful to them."

For some adolescents, this religious questioning may result in an attempt to find a faith that meets their needs better than the one they currently have, or more commonly, in a lessening of religious observances. It has been observed that the adolescents of today attend church or religious activities far less than adolescents of previous generations (Hurlock, 1982).

While it seems that a withdrawal from religion and the church is fairly normal during the adolescent years, the implications of this withdrawal may be best observed in light of the influence of religion and the church in adolescents who are still very much in touch with their religious beliefs.

For one, U.S. studies on adolescents show that greater religiosity is associated with delaying the onset of sexual intercourse (Lammers et al, 2000) and a lower likelihood of voluntary sexual activity (Holder et al, 2000).

V. SEXUAL AND REPRODUCTIVE LIVES OF ADOLESCENTS: CRITICAL ISSUES

It can never be emphasized enough that while adolescence is a period of developmental self-realization and opportunities, it is also a critical stage of life fraught with risks and hazards which, when not dealt with adequately, can bring about heavy human and social costs.

Adolescent Marriage

Overall, adolescent marriage is becoming less common than it was a generation ago, although the trends vary regionally (Population Reference Bureau, 2000). For example, in countries such as Nepal and Indonesia, adolescent marriage is still practiced. In Pakistan, one-third of adolescent girls become mothers before age 20 while in Bangladesh, almost three-fourths of the women marry before the age of 18 (Durrant, 2000). In countries like the Philippines and Sri Lanka, however, only 14% marry before the age of 18; and in China, the percentage is much lower at 5% (Asian Institute for Development Communication, Module 1, 1998).

Generally, age at marriage is considerably lower for girls than for boys. For example, in Pakistan, more than 50% of women currently in their 20s were married during adolescence compared to one-fifth of men (Durrant, 2000). The age at marriage is also increasing in most countries and is influenced by education, urbanization, employment opportunities and communication (Asian Institute for Development Communication, Module 1, 1998).

Adolescent marriage also tends to be higher in rural rather urban areas. In India, for example, 80% of women aged 20-24 in the rural areas are married by the age of 20 while in urban areas, the percentage for this was much lower at 50% (Asian Institute for Development Communication, Module 1, 1998). In Nepal, 56% of women in rural areas marry before the age of 18 compared to 36% in urban areas. Indonesia reflects similar findings, although the rate for adolescent marriage in Indonesia is lower than that of India and Nepal with 38% of women in rural areas marrying before the age of 18 and a corresponding 11% for women in urban areas. For both Nepal and Indonesia, the trend for early marriage among men also follows that of the women, except for slightly lower levels of incidences (Achmad et al, 2001).

Late marriage has a number of implications. Young women who marry later have a greater chance of attending higher levels of schooling than those who marry early. Subsequently, women with more education tend to be healthier and more prosperous, and have fewer and healthier children (Population Reference Bureau, 2000). This is in contrast to adolescent women who marry before reaching full physical maturity, which leads to reproductive health problems and reduced chances of survival for their children (Asian Institute for Development Communication, Module 1, 1998).

On the other hand, marrying at a later age along with increased premarital sex among adolescents exposes young people to greater risk of unintended pregnancies, unsafe abortion,

births outside marriage, and STDs, including HIV/AIDS (Population Reference Bureau, 2000).

Sexual Debut and Premarital Sex

In all regions of the world, the incidence of premarital sex is reportedly increasing, most especially in developed countries such as the United States where 68% of teenage women have had sex and France where 72% have had premarital sex before the age of 20 (Population Reference Bureau, 2000).

Studies also show that premarital sex, both in developing and developed countries, is more common among young men than among young women. In a study among teenagers aged 13-14 in Scotland, for example, it was found that 18% of boys and 15.4% of girls had experienced sexual intercourse before their 13th birthday. A study in Malaysia reflected that boys (18.8%) are more likely to be sexually experienced than girls (7.11%) (Koetsawang, 1990). Choe, Lin, Podhisita & Raymundo (2001) also add that among 15-24 year old sexually active men and women in the Philippines, 87% of the male respondents were found to have had premarital first sex as opposed to 30% of women. In Taiwan and Thailand, the ratios of premarital first sex for sexually active young men and women are 92% to 70% and 93% and 30% respectively (Choe, Lin, Podhisita & Raymundo, 2001).

The bulk of evidence gathered by Xenos et al (2001) from their analyses of data on Indonesia, Taiwan, Hong Kong, Philippines and Thailand regarding the relationship between schooling and sexual debut indicates that staying in school postpones sexual debut. Having some college education or even just planning to have a college education has been found to substantially lower the probability of having premarital first sex among Filipino and Thai women.

The value of education as a factor in reducing the incidence of premarital sex and delaying sexual debut worldwide may prove to be even greater when factoring in other resources provided by schools, on top of education itself. These resources include sex education classes as well as alternate activities for young individuals such as sports and physical activity. The latter, for example, has been found to have several implications on sexual debut, premarital sex, and contraception use among adolescents.

Brown et al (1996) determined that the more days adolescent females exercised per week, the more likely they were to postpone their first experience with sexual intercourse. This conclusion is congruent to those of a preliminary analysis from a U.S. study of adolescents in western New York which indicated that higher rates of athletic participation among adolescent females were significantly associated with lower rates of both sexual activity and pregnancy (Sabo et al, 1996). Another U.S. study also found that female athletes were less likely to get pregnant, were more likely to be virgins, experienced first intercourse later in adolescence, engaged in sexual intercourse less often and had fewer sexual partners. Results for male

athletes were mixed and the only consistent pattern between athletic and non-athletic males was that athletes experienced first coitus at an earlier age than non-athletic males. Athletes, regardless of sex, were more likely to use contraceptives than non-athletes (Sabo et al, 1996).

Extracurricular activities such as sports and physical activity have been found to be significant to the development of adolescents. Interdisciplinary findings tend to show that participation of adolescents in sports form part of a mutually reinforcing array of physical, psychological and social processes that enhance health, adequate functioning, quality of life and the overall educational experiences of young people. Successful sport experiences have also been reported to build confidence, self-esteem (Chrysler Fund, 1989; McAuley, 1994; Gruber, 1986) and positive body image (Jaffee & Manzer, 1992; Miller Lite Report on Women in Sports, 1985), personal qualities that are especially important and have been found lacking in most adolescents. Regular exercise, physical activity and sports have also been shown to be anti-depressive and thus make young girls have more energy, feel better and cope more effectively with stress (Lutter & Jaffee, 1996).

Adolescents' Level of Knowledge and Awareness of Sex and Reproductive Health

Despite having better educational opportunities, many adolescents today are reported to be "less informed, less experienced and less comfortable in accessing family planning and reproductive health services than adults" (Program for Appropriate Technology in Health, 1998 as cited by the Reproductive Health Outlook). Adolescents may experience resistance and even hostility from adults when they attempt to obtain reproductive health information and services they need. As a consequence, they may be exposed to increased risk from STDs, HIV, unintended pregnancy and other health hazards, which can affect their future and the future of their communities.

The level of knowledge and awareness of the youth regarding reproductive health and sexually transmitted diseases are crucial factors in determining their sexual behavior and practices. In a study conducted among 14-17 year olds in East Asia and the Pacific, 60% or more of the respondents mostly in East Timor, Lao PDR, Indonesia and The Philippines said that they knew little or nothing about HIV/AIDS and sexual relationships. The countries where respondents claimed to know 'a lot' about HIV/AIDS and sexual relations comprised only 15% of the entire group and mostly came from Australia, Singapore, and Vietnam. The same study also showed that more than 70% of the respondents (some 54 million) in Myanmar, East Timor, China and Indonesia do not know what a condom is. In Australia, Hong Kong and Singapore, however, more than 90% said that they know what a condom is (UNICEF, 2001). Thus, it would seem that opportunities for attaining sex education in more developed countries are greater than those in less developed countries.

HIV/AIDS and Other STDs

HIV/AIDS is undermining investments in youth and women throughout the developing world (State of the World's Children, 2002). According to the WHO, about half of the people infected with HIV are under 25 years old, and 90 percent of them live in less developed countries. In those less developed countries, as high as 60 percent of all new infections are among young people aged 15 to 24 and among these, there are twice as many young women as there are young men" (Population Reference Bureau, 2000).

The risk of contracting HIV/AIDS and other STDs is higher among adolescents than other age-groups. First, adolescents tend to engage in riskier sexual behavior. Young men, in particular, tend to have more partners, more of them high risk, and often forego the use of contraception. Second, adolescents tend to lack adequate information and understanding of HIV/AIDS (Population Reference Bureau, 2000). Many of them are unaware of such relevant information as their vulnerability to the disease and measures by which they can prevent it.

Statistics from all parts of the world show that the incidence of STDs among adolescents has increased markedly in the past 20 years. Five percent of all teenagers contract an STD each year, and 20% of the people with AIDS probably contracted the disease during adolescence (Macieira & Nettesheim, 1994).

Control of STDs among teenagers is hindered by denial of the likelihood of contracting the disease among teenagers, fear of adult recrimination if they seek information or help, and the obstacles which plague all age groups such as the asymptomatic nature of many of the STDs. There are also biological reasons for the vulnerability of young women to STDs. Younger women have "fewer protective antibodies than older women and the immaturity of their cervixes increases the likelihood that exposure to infection will result in the transmission of the disease" (Landry & Turnbull, 1998, Population Reference Bureau, 2000).

Certain cultural practices also place adolescents at risk. In Latin American countries young men experience first intercourse with a prostitute (Macieira & Nettesheim, 1994) while still in some societies, sexual coercion of young girls through offering gifts or payment is a common occurrence precisely because they are perceived as being free of disease (Landry & Turnbull, 1998). In Africa, in particular, "sugar daddies" who believe that they can rid themselves of STDs by having intercourse with a young or virgin girl, and female circumcision which increases bleeding during intercourse are two factors that increase the risk of HIV transmission for young girls (Macieira & Nettesheim, 1994). Even the simple pairing of young women with older men in some cultures raises the risk of infection among young girls as it is more likely that older men have usually had more partners, while young women are also less able to negotiate sex and condom use due to lack of information and power to make their own decisions (Asian Institute for Development Communication, Module 1, 1998).

Efforts throughout the world to educate teens about STD risks take such forms as school-

based and community outreach programs and peer counseling. Programs that target males and those that provide telephone hotlines have been particularly successful. Other innovative approaches include the production of "survival sex" videos for street children, drama groups, and condom distribution at soccer matches and in schools. The key to a successful strategy seems to be providing an open and safe environment for discussion that shows respect for the ideas and feelings of the adolescents (Macieira & Nettesheim, 1994).

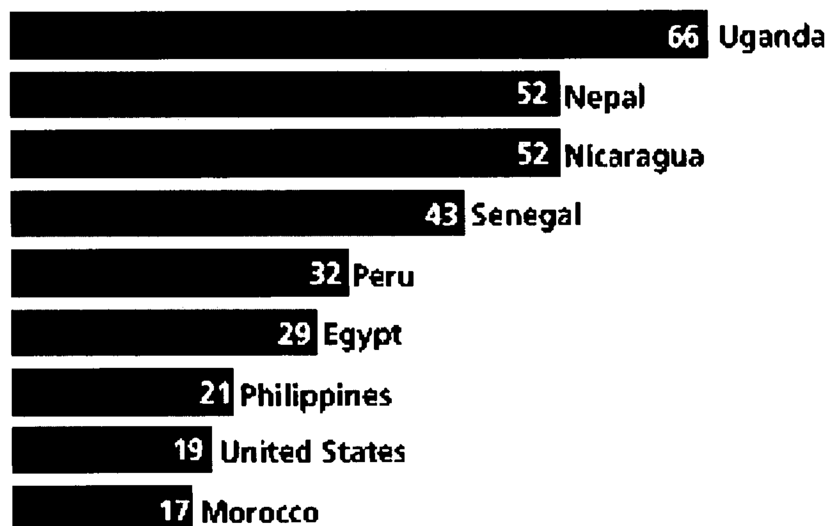
At present, countries in every region have also been providing leadership models for teaching teens how to protect themselves against AIDS. In Thailand, the "100% Condom Campaign" as a national policy in 1991 to promote condom use among youth, as well as distribute 60 million free condoms yearly to sex industry workers. The program quickly increased condom use by more than 30% and new HIV infections were reduced (State of the World's Children 2002). In Mexico, the largest private family planning provider, MEXFAM, began in 1986 an adolescent program in urban areas called "Gente Joven" or "Young People." The community-based approach uses youth promoters for outreach activities to reach out to adolescents on their own turf, such as schools, clubs, recreation centers, gang hangouts and sports facilities. The program has reached over four million young people since its inception. Gente Joven recognizes that young people will explore their sexuality regardless of societal constraints; therefore, it promotes safe, healthy, and responsible sex. The program confronts the strong negative attitudes many adults have toward adolescent sexuality by working to sensitize parents, teachers, and local politicians through films, discussions, pamphlets, and radio programs (Population Reference Bureau, 2000).

Pregnancy and Birth Rate

The incidence of adolescent pregnancy is becoming increasingly common in many countries (Figure 2). According to studies, nearly one-quarter of girls aged 15-19 years are either pregnant or have already given birth (Futurist, 2000). The number of children born to adolescent women every year reaches up to 15 million (The White Ribbon Alliance for Safe Motherhood, 2000) which accounts for around one-fifths of all births (Asian Institute for Development Communication, Module 1, 1998).

Both the young women and their children face serious health risks from early pregnancy and childbearing. In fact, girls aged 15-19 are more likely to die from complications of pregnancy and childbirth than from any other cause (Population Reference Bureau, 2000). The risks are twice as high for women in their twenties while those under 15 years of age are five times even more at risk (The White Ribbon Alliance for Safe Motherhood, 2000). One reason for this is the physical structure of adolescents. Adolescent women who get pregnant early do not get to complete their growth in height and pelvic size and are thus, at greater risk of obstructed labor when the birth canal is blocked. This can lead to permanent injury or death for both the mother and the infant. Another reason why the risks are higher for

FIGURE 2. Percentage of Women Giving Birth by Age 20, Selected Countries



Source: 1995 National Survey of Family Growth (Hyattsville, MD: National Center for Health Statistics).
Source: Demographic and Health Surveys, 1995–1998 (Calverton, MD: Macro International) taken from the World's Youth 2000 (Population Reference Bureau, 2000)

adolescent women is that they have less experience, resources and knowledge about pregnancy and childbirth than older women. As a result, they and their children usually suffer when obstetric emergencies occur (Population Reference Bureau, 2000).

Adolescent pregnancy also has significant effects for the infant the young girl is carrying. Infants of young mothers are most likely to be premature and have low birth weights (Population Reference Bureau, 2000; Asian Institute for Development Communication, Module 1, 1998). Even worse than this, adolescent births may also result in stillbirth or early infant death. It is reported that the risk of death in the first year of life is typically 30% greater among babies whose mothers are aged 15-19 years than among those born to mothers aged 20-29 years (Asian Institute for Development Communication, Module 1, 1998).

Of the 15 million young women who give birth every year, 13 million live in less developed countries (Population Reference Bureau, 2000). Compared to 10 % of teenage birth rates in developed countries, 33 % of women in less developed countries give birth before the age of 20, ranging from eight percent in East Asia to 55 % in West Africa (Population Reference Bureau, 2000). This means not only limited life choices and opportunities for the mother, especially those living in developing countries, but also a disadvantaged situation for children

born to poor and uneducated mothers. If those children reach the age of seven, they remain at high risk of lower levels of education and health because access to welfare benefits is reduced dramatically when a child has turned five years of age.

Contraceptive Practices

The issue of birth control and contraceptives has always been a sensitive and much argued topic. On the one hand, birth control is argued as a necessary and effective means of promoting population control and minimizing the spread of HIV/AIDS and STDs. On the other hand, modern methods of birth control are strictly forbidden by the Catholic Church' teachings and frowned upon as well by various other organizations, even for married couples. In this regard, more traditional means such as natural family planning and abstinence from premarital sex are the only methods allowed. If the use of birth control methods is controversial even for married couples, this issue becomes even more sensitive for the case of sexually active adolescents.

The use of birth control methods in developing countries is not as prevalent compared to their more developed counterparts. In Asia, for example, some of the lowest rates of birth control use belong to Pakistan and India which report only 5% and 7% contraceptive use respectively. In Indonesia and Thailand, however, the percentage of contraceptive use is much higher with 36% and 43% respectively (Asian Institute for Development Communication, Module 1, 1998).

The data for other countries is presented in terms of the percentage of adolescents engaging in sex without using contraception. In Bangkok, a study showed that the percentage of sexually active adolescents not using contraceptives was over 40% (Koetsawang, 1990) while in Malaysia, another survey showed that the percentage was 72% (Zulkifli & Low, 2000).

It has also been found that among 200 female adolescents requesting abortion in Thailand, only 18 girls or 9% used contraceptives in the month of conception (Koetsawang, 1990). Studies also show that adolescents, on the whole, are less likely to use contraceptive methods, compared to women over 20. In addition, 12-42% of married adolescent women in less developed countries reported not using family planning despite their desire to space or limit births (Population Reference Bureau, 2000).

Several reasons have been given for the low level of contraceptive use. According to Koetsawang (1990), little concern for pregnancy was the number one reason, followed by poor or lack of contraceptive knowledge and the unwillingness of the partner to use contraceptives. Another reason cited is that teenagers tend to desire spontaneity of sexual encounters and are thus, not likely to be motivated to use any protection or simply be prepared when the opportunity presents itself (Raymundo & Lusterio, 1995). Still another reason may be cultural, religious and social factors, which make it difficult for women especially to use contraception without fear of stigma and public disapproval (Dailard, 2000).

Even if adolescents themselves are willing to use contraception, many of them may not find it so easy to have access to these in certain societies. Dailard (2000) reports that, in particular, women in developing societies are unable to obtain contraceptive supplies or avail themselves of family planning services because of the expense, lack of supplies, and difficulty in obtaining these. Furthermore, even in situations where couples are able to obtain contraceptives, adequate and accurate information needed to effectively use these are sometimes lacking (Dailard, 2000).

Another factor to consider is the abortion issue, usually associated with adolescent pregnancy. Unsafe abortion is also a contributing cause to the number of deaths of young pregnant women every year. The implications of unsafe abortion are particularly significant in most East and Southeast Asian countries where abortion is not legally available on request and is furthermore, not accepted socially. Yet the number of adolescent women in developing countries undergoing abortions has been estimated to be between one million and 4.4 million annually. Adolescents are more likely to hide pregnancy, seek abortion relatively late, and have the procedure performed by untrained providers under clandestine and unsafe conditions. Thus, they stand a high risk of having serious complications such as hemorrhage, septicemia, and injuries leading to permanent disability or death. In addition, the resulting infection may lead to infertility, which has serious cultural and social consequences within marriage (Asian Institute for Development Communication, Module 1, 1998).

Sexual Assault

Perpetrators of sexual assault may either be strangers or friends or acquaintances of their victims. The latter, however, seems to be more common among cases of sexual assault of adolescents as reported by several studies. In the United States, for example, data show that two-thirds to three-fourths of all adolescent rapes and sexual assaults were committed by an acquaintance or relative of the victim (Muram et al, 1995; Peipert & Domagalski (1994), National Victim Center, 1992 as cited by American Academy of Pediatrics 2001, Everitt and White). In South Africa, 60% of rapists reportedly knew their victim (Reproductive Health Matters).

Sexual assault cases also predominantly report females as the victims. In 1998, the U.S. Department of Justice reported that of the 5 per 1000 people annual rate of sexual assault for both males and females aged 16-19; the ratio of female to male victims of adolescent rape and sexual assault was 13.5:1.

Perhaps the most commonly heard form of sexual assault is rape which has been defined by the American Academy of Pediatrics (2001) as "forced sexual intercourse that occurs because of physical force or psychological coercion" and by the Palo Alto Medical Foundation as "the crime of forcibly engaging in sexual intercourse with a person who has not consented." According to global data, between one-third and two-thirds of rape victims are 15 years old or younger. In America, the statistic is one out of four (Everitt and White, n.d.).

Certain factors have been found to be correlated with the prevalence of rape in certain societies. Foremost among these is the sociocultural context in which rape occurs. According to the Academy of American Pediatrics (2001), "Adolescent rape exists in a sociocultural context in which issues of male dominance, appropriate gender behaviors, female victimization and power imbalances in relationships are highly visible." The creation of a sociocultural context begins, however, in the mindset and attitudes of individual people, and it is therefore necessary to examine the views and attitudes with which rape and its occurrence is regarded by both the assailants and the victims. In South Africa, for example, where one in four men said they had committed rape by the age of 18, 80% had also said that women were responsible for causing sexual violence. Thirty percent said they thought women "asked for it," 20% thought women enjoyed it, and 10% thought gang rapes were "cool." Among the women victims, on the other hand, more than 50% thought they were partly responsible for causing sexual violence and over 10% said they had no right to avoid sexual abuse (Reproductive Health Matters, 2000).

In addition to the views and attitudes, which may be said to perpetuate the incidence of rape, certain behaviors have also been found to be correlated with the incidence of rape. Seifert (1999) reports that more than 40% of adolescent victims and assailants have reported alcohol or drug use immediately before a sexual assault while Everitt and White tag the statistics for alcohol use before the incident of rape as 75% among its perpetrators and over 50% among the victims. One reason behind the correlations is offered up by surveys that have shown that women who drink alcohol are generally perceived by men to be "more sexually available" than women who do not drink (Everitt and White, n.d.). Another may also be the illegal availability and use of the so-called "date rape drug" flunitrazepam among some adolescents (American Academy of Pediatrics, 2001).

The incidence of rape poses certain serious physical and psychological consequences for young people. Consequences may be compounded even further by the fact that adolescent female victims, in particular, are more likely to delay seeking medical care after rape and sexual assault (American Academy of Pediatrics, 2001). For the latter, one of the most serious psychological effects of rape is posttraumatic stress disorder which is said to occur among 80% of rape victims (Pynoos & Nader, 1992). Other reactions to rape include feelings of trust violation, increased self-blame, negative self-concepts, anxiety, alcohol abuse, and effects on sexual activity such as a younger age at voluntary sexual activity, poor use of contraception, greater number of abortions and pregnancies, STDs, victimization by older partners and sexual dissatisfaction (Miller et al, 1995; American College Obstetricians and Gynecologists, 1997; Boyer & Fine, 1992; Moore et al, 1989; Smith et al, 1996; Taylor et al, 1997).

VI. CONCLUSION

Adolescence may be viewed as a transition period wherein the individual moves from childhood to adulthood. Throughout this stage adolescents are striving to establish their own personal identities, as they take on an increasingly active role in the directions towards which their lives are headed. It is during this period that they achieve a clearer picture of their own individual personalities, acquire their sets of values and goals, and begin to take steps towards preparing for future challenges such as getting a job or starting a family. All these do not happen in a vacuum—several influences impinge upon this process of development with the socio-economic environment and significant agencies of socialization making their particular imprints in the personal unfolding of the individual member of this group. This is a daunting task, and it is critical that governments and society must continually concern themselves with providing adolescents with the ideal environment wherein they can make the best decision about their future.

Looking at the population of adolescents worldwide, we have seen how their numbers impact on the existing socio-economic structures and provide both the impetus and the critical avenue for institutions of social change to affect present and future arenas of various global issues such as health, education, urbanization and population.

A number of issues emerged at the conclusion of this review. We have also seen how adolescence is not only a society-defining stage in a country's development; it is also a life-defining stage in an individual's development. It is the stage where the major forces of influence working on an individual (e.g., the family, the school and the peer group) become most crucial in forming and shaping the attitudes and behavior of the individual himself. There is, therefore, a cycle of influences in action, involving the reciprocal influence of the adolescent and society. Consequently, meeting adolescent needs, particularly in providing for their sexual and reproductive health information and services, is vital to their future.

Several approaches have been mentioned in the literature attempting to address some of the issues that were outlined in this paper. Notable among the various studies and research reviewed is the primary role of education as a major intervention for adolescents. The quality and content of education curriculum is also an essential consideration, particularly in providing health education to adolescents including information on sexuality, responsible sexual behavior, voluntary abstinence, STDs and HIV/AIDS. As Peter Xenos (2001) has pointed out, "we all recognize but do not consider seriously enough how truly revolutionary modern mass schooling is. It is surely the most important intervention into the lives of the young, and in most countries has now thoroughly reshaped that time of life."

As we call for adolescents' active participation in shaping the programs and interventions to help themselves, it is important to emphasize as well that parental involvement is just as crucial in as much as the family has been shown to be still a very important influence among

adolescents. Interventions must encourage parental involvement and promote adult communication and interaction with their children in order to help bridge the generation gap. And since peer group approval is considered most influential during the adolescent stage, utilizing them to reach out to young people will enhance the likelihood of success for any intervention, as in the case of the notable project Gente Joven in Mexico.

It was noted that health services for adolescent are quite lacking. Programs and policies that provide for integrated health services to adolescent, especially for the sexually active ones, must be encouraged. These health services must be adolescent-friendly by ensuring confidentiality, privacy and respect.

Because of the general low status of women, it is also important that measures must be taken to eliminate all forms of violence against women, particularly adolescent girls.

There are many interventions that have already been proven to work in some countries. These need to be studied so that they can be replicated in different cultural settings. It cannot be overemphasized that an important aspect in the design of adolescent intervention is the involvement and action of young people themselves in the different programs and policies concerning their welfare.

All of these are considerations that must be factored in when formulating a comprehensive strategy for dealing with the youth. Being as urgent as they are, it is imperative that the issues that have been raised in this paper must be called to public attention and given immediate action by the various sectors involved. The future of adolescents is inseparable from the future of societies and the world at large, and as such, it is essential that continual efforts must be made to support and enhance their developmental experience towards adulthood and becoming responsible members of society.

NOTES

1 These six stages with their developmental tasks according to Havighurst are as follows: (1) Babyhood and early childhood (from beginning to eat solid food to learning the distinction between right and wrong, and developing a conscience), (2) Late Childhood (learning physical skills for ordinary games to achieving personal independence, (3) Adolescence (achieving new and more mature relations with age mates of both sexes to achieving emotional independence from parents and other adults, (4) Early adulthood (Getting started in an occupation to Finding a congenial social group, (5) Middle age (achieving adult civic and social responsibility to adjusting to aging parents, and (6) Old Age (adjusting to decreasing physical strength and health to adapting to social roles in a flexible way).

2 Since the role of parents is somewhat diminished here, this would seem to indicate a greater need for other sources of "authority" such as the school and the media to exercise greater judgment and responsibility in bringing about more favorable self-concepts and confidence in the teen.

3 A study conducted among young women in the Philippines showed that there was an increase in the approval of having premarital sex from a 29% approval percentage in 1982 to 44% in 1994 (Kabamalan, 2001)

4 Although widespread and common enough to be noted, these changes are not necessarily universal to all societies.

5 Traditional parental beliefs that education is more beneficial to boys than to girls is one of the major reasons for the lower school enrollment and attendance rate for girls compared to boys.

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